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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,534	07/29/2003	Riad Ghabra	LC 0136 PUS	1533
36014	7590	06/19/2006	EXAMINER	
ARTZ & ARTZ, P.C. 28333 TELEGRAPH ROAD, SUITE 250 SOUTHFIELD, MI 48034			RUTLAND WALLIS, MICHAEL	
			ART UNIT	PAPER NUMBER
			2835	

DATE MAILED: 06/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/604,534

Applicant(s)

GHABRA ET AL.

Examiner

Michael Rutland-Wallis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 July 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                        |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____   |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

### ***Response to Arguments***

Applicant's arguments filed 05/18/2006 have been fully considered but they are not persuasive.

With respect to applicant's arguments addressing claim 1, applicant alleges Kokubu and Janssen fail to teach a sensor that generates a position in response to a change in a magnetic field generated by stationary rotation. In effort to clarify the limitation "stationary rotation" Jeffery Chapp was contacted on Thursday, June 08, 2006. Mr. Chapp alleged item 20 of Janssen for example was stationarily rotated as opposed to for example item 26 of Janssen, which is, rotated in a non-stationary manner. The examiner would like to thank Mr. Chapp in explaining the meaning of the above limitation, however the examiner respectfully submits the rotation of a device

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precludes the device from remaining stationary. It is suggested by the examiner that the limitation "stationary rotation" be deleted from the claim as it renders the claim unclear nevertheless should applicants contend otherwise a precise definition of the limitation is required to be added to the specification, no new matter should be added.

Applicant's arguments addressing claim 14 and 15-20 are moot in view of a new grounds of rejection.

### ***Claim Objections***

Claim 1 is objected to because of the following informalities: the second recitation of the field altering device in line 4 of the claim 1 is misspelled and currently reads "said filed altering device"

It is also noted Claim 1 in line 8 recites "stationary rotation of said field altering device" this newly added limitation is unclear to the office as rotation of a device precludes the device from remaining stationary.

Claim 3 recites "said key actuated device is a key" it is unclear how a key is a device, which is actuated by key. Therefore in order to further prosecute the merits of claims 3 the office interprets the above said limitation to be "said key actuated device is actuated by a key"

Appropriate action is required.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The rejections made below are, as best can be understood in view of the cited clarity issues cited above.

Claims 1-2, 9-11 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Janssen (U.S. Pat. No. 6,958,551)

With respect to claims 1, 11 and 15 Janssen teaches an active keyed locking system for a vehicle comprising: a magnetic field altering device (item 26) a keyed actuated device (item 13 cylinder) coupled to said field altering device; a non-mechanically operated position sensor (item 30 magnetic sensor) located proximate to is said keyed actuated device and generating a position signal indicative (i.e. rotated to start position or rotated to off position) of position of said keyed actuated device in response to detected change in a magnetic field due to stationary rotation (stationary rotation of lock cylinder item 13 coupled to field altering device item 26) of said field altering device; and a controller ( control module seen best in Fig. 7 and 9) electrically coupled to said position sensor and enabling at least one vehicle component (ignition) in response to said position signal.

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With respect to claim 2 Janssen teaches the keyed actuated device is a lock assembly.

With respect to claim 9 Janssen teaches the position sensor a Hall effect sensor.

With respect to claim 10 Janssen teaches the position sensor is coupled within a base station (see Fig. 1).

Claims 3-8 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Janssen (U.S. Pat. No. 6,958,551) in view of Kokubu et al. (U.S. Pat. No. 5,745,026)

With respect to claim 3 Janssen teaches the device of claim 1 and Janssen further teaches the keyed actuated device (locking cylinder item 13) comprises a keyway item 20 for the insertion of the key and the actuation or rotation of the key is used to rotate the locking cylinder to alter the magnetic field in order to enable the ignition of the vehicle. As best can be understood by the office Janssen anticipates the limitations of claim 3. If applicant holds otherwise Kokubu also teaches an ignition key actuation of keyed device. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Janssen to include the key system on Kokubu in order to increase the security by increase the complexity of the ignition key.

With respect to claims 4 and 5 Janssen does not teach the key comprises a signal generator generating a transmission signal. Kokubu teaches a vehicle ignition securing system where the key comprises a signal generator generating a transmission signal (Fig. 2 item 2 see column 3 lines 1-7) where the transmission on the signal alters the surrounding field.

With respect to claim 6 Kokubu teaches the key comprises a magnetic device (Fig. 1 item 8).

With respect to claim 7 Kokubu teaches the key comprises a coil (Fig. 1 item 8) and a transponder (Fig. 2 further see column 3 line 66- column 4 line 40) coupled to said coil and generating a transmission signal.

With respect to claim 8 Kokubu teaches the key generates an authorization signal (column 4 lines 11-17), said controller enabling at least one vehicle component (Fig. 1 item 13) in response to said authorization signal.

With respect to claim 12 and 16 Janssen teaches a recognition device (keyway) to mechanically recognize the ignition key however Janssen recognition device is understood to be mechanical in nature it does not generate a signal. Kokubu teaches a recognition device (Fig. 1 item 21) recognizing a key and generating a recognition signal wherein said controller enables the active keyed locking system in response to said recognition signal (column 3 line 66- column 4 line 40). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Janssen to include the key with recognition signal seen in Kokubu in order to increase the security by increase the complexity of the ignition key.

With respect to claim 13 Janssen teaches the keyed actuated device is a lock assembly but does not teach the use of an antenna. Kokubu teaches the keyed actuated device is a lock assembly (Fig. 1 item 15 see Fig. 4 for greater detail), said lock assembly comprising a key antenna (Fig. 1 item 16 and 2). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Janssen

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to include the key with an antenna seen in Kokubu in order to increase the security by increase the complexity of the ignition key.

With respect to claim 17 Kokubu teaches activating a base station (Fig. 4 shows the position indicator to be coupled within the steering column and further coupled to the cam shaft see column 6 lines 1-25) in response to said key recognition.

With respect to claim 18 Kokubu teaches generating a first authorization signal; generating a second authorization signal in response to said first authorization signal; verifying said second authorization signal (column 3 line 66- column 4 line 40); and generating said position signal in response to said verification (column 5 lines 25-43).

With respect to claim 19 Kokubu teaches determining position of said keyed actuated device comprises: generating at least one base signal (code  $\Delta B$  column 4 line 17-26); altering (code  $\Delta C$  column 4 line 17-26) said at least one base signal via actuation of said keyed actuated device; and generating (code  $\Delta D$  column 4 line 17-26) said position signal in response to said alteration of said at least one base signal.

With respect to claim 20 Kokubu teaches at least one base signal is modulated (Fig 2 item 5) using a modulation technique selected from at least one of amplitude modulation (column 4 lines 27-37), frequency modulation, and phase modulation.

Claims 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Janssen (U.S. Pat. No. 6,958,551) in view of Kito (U.S. Pat. No. 6,703,721) Janssen teaches an ignition enabling system for a vehicle comprising: a lock assembly (Fig. 1); a key (inserted in keyway item 20) which is engageable with said lock assembly; position sensor (item 30 magnetic sensor) located proximate to is said key, while Janssen is



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more concerned with the magnetic field than the change in the electric field, however as applicant admits in paragraph 0043 of the specification the positions sensor may be of various type known to those skilled in the art, therefore it would have been obvious to one of ordinary skill in the art at time of the invention to use an electric field detector in the place of the magnetic field detector to detect a change in response to a change in the electric field. Janssen does not teach the key has a transponder associated with the key. Kito teaches vehicle ignition enabling system with a key having a transponder (see Fig. 1). Kito further teaches the use of a RF amp (item 3), which senses a change in the electromagnetic field generated from the transponder (item T in Fig. 1) on the key when the key is rotated from a lock or off position to an operational position in order to allow the ignition or vehicle accessory to activate. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Janssen to include the use of a transponder and to sense electric field changes rather than magnetic fields as seen for example in Kito in order to increase security.

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Rutland-Wallis whose telephone number is 571-272-5921. The examiner can normally be reached on Monday-Thursday 7:30AM-6:00PM EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn D. Feild can be reached on 571-272-2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MRW



ANATOLY VORTMAN  
PRIMARY EXAMINER